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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/384,141	08/27/1999	IKKO FUSHIKI	03797.81834	7425

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EXAMINER

LAROSE, COLIN M

ART UNIT	PAPER NUMBER
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2624

DATE MAILED: 04/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/384,141

Applicant(s)

FUSHIKI ET AL.

Examiner

Colin M. LaRose

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 4, 6-8, 11-16, 19-23, 57 and 60-62 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4, 6-8, 11-16, 19-23, 57, and 60-62 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/17/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3 March 2006 has been entered.

Response to Amendments and Arguments

2. Applicant's amendments to independent claims 1, 15, 23, 57, and 60-62 are sufficient to overcome the previous rejections under 35 USC § 103(a) based on the combination of Holm and Pritchett. However, newly-added limitations render these claims indefinite, as explained below.

Claim Objections

Independent claims 1, 15, 23, 57, and/or 60-62, and all claims dependent therefrom, are objected to because of the following informalities:

3. Claim 1, line 13 recites, "wherein the R_0 , G_0 , B_0 values are obtained in accordance with the following:". The equation that follows is for obtaining XYZ values. Therefore, it appears that the above phrase should read: "wherein XYZ values are obtained in accordance with the following:".

Appropriate correction and/or clarification is required. (This error also appears in claims 15, 23, 57, and 60-62.)

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4. Claim 1 (p. 3 of amt. dated 3/3/06) recites, “XYZ values based upon a traversen [sic] matrix...” It appears this should be changed to “a transverse matrix.” (See e.g. p. 11, line 15 of the Specification).

Appropriate correction and/or clarification is required. (This error also appears in claims 15, 23, 57, and 60-62.)

5. In claim 1 (p. 2 of amt. dated 3/3/06), the phrase “wherein the XYZ values with respect to” should be changed to “wherein XYZ values with respect to”, since this is the first occurrence of these particular XYZ values. Appropriate correction is required. (This error also appears in claims 15, 23, 57, and 60-62.)

6. In claim 1 (p. 4 of amt. dated 3/3/06), “collowing” should be changed to “following”. Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 4, 6-8, 11-16, 19-23, 57, and 60-62 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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8. Claims 1, 15, 23, 57, and 60-62 recite the variables " X_w " and " Z_w " within the matrix S_w and then again within the matrix S_w^{-1} . There is insufficient antecedent basis for these limitations in the claim. These variables should be expressly defined in the claim in accordance with the Specification.

[In the Specification, the variables " X_w " and " Z_w " appear to denote the X and Z values corresponding to the white point of a given device. However, the claims are not clear as to what device or white point these variables correspond. See e.g. pp. 11-13 of the Specification.]

Correction and/or clarification as to the definition of the " X_w " and " Z_w " variables is required.

9. Claims 1, 15, 23, 57, and 60-62 recite the variables " n " and " u " within the M^{-1} matrix, and the variables " m " and " t " within the M matrix. There is insufficient antecedent basis for these limitations in the claim. These variables should be expressly defined in the claim in accordance with the Specification, or alternatively, Applicant should point out the significance or meaning of these variables so that those skilled in the art are reasonably apprised of the metes and bounds of the claim with respect to the M and M^{-1} matrices.

Allowable Subject Matter

10. Claims 1, 4, 6-8, 11-16, 19-23, 57, and 60-62 would be allowable if independent claims 1, 15, 23, 57, and 60-62 are rewritten or amended to overcome the claims objections and rejections under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

11. The following is an examiner's statement of reasons for allowance:

None of the cited prior art references discloses or suggests the claimed steps of mapping RGB values of a first device into gamut expanded sRGB (i.e. "XsRGB") values, using the claimed mapping transformations.

Also, none of the cited prior art references discloses or suggests the claimed steps of converting the gamut expanded sRGB (i.e. "XsRGB") obtained by the mapping transformations into RGB color data values of a second device, using the claimed converting transformations.

Neither Holm nor Pritchett disclose or teach any details of the transformation matrices for converting between an RGB color space and an expanded sRGB color space.

Hidaka does not disclose or teach the claimed transformation matrices since Hidaka utilizes XYZ as an intermediate color space rather than a gamut expanded sRGB color space, as claimed. See e.g. figure 7 of Hidaka.

IEC 61966-2-1 (sRGB) discloses conversions between RGB and sRGB color spaces but does not expressly teach converting between RGB and a gamut expanded sRGB using the claimed transformation matrices. Furthermore, IEC 61966-2-1 does not employ the white-point correction represented by the claimed S_w and S_w^{-1} matrices.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Colin M. LaRose whose telephone number is (571) 272-7423. If

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attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu, can be reached on (571) 272-7429. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2600 Customer Service Office whose telephone number is (571) 272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Colin LaRose
Group Art Unit 2624
16 April 2006